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THE GENESEE FARMER.

SATURDAY, JAN. 23, 1836.

AGRICULTURAL PAPERS.

One of our agents has made the following communication:

"My friend B. within the last year, has added some fields to his farm by purchase, besides being engaged in building, and as a consequence his purse is not quite so well replenished as usual. This induced him some time ago to pause and consider whether it would be best to continue his subscription to the Genesee Farmer, or not. I saw him yesterday, and inquired into the result of his deliberations, and as nearly as I can remember, he spoke as follows. 'I suppose I shall have to take it, for I should not feel right without it. It has *saved* me more than it has *cost* me. Last fall, I had a lot of peas, and offered a dollar an acre for mowing them; but soon after I saw an account in the Farmer, stating that the Horse Rake would gather them without mowing. Accordingly I put a boy on the horse and went to work with it, and in half a day I had two acres and a half in snug winrows. That single article saved me much more than the price of the paper.'"

Such remarks as the following from a subscriber in Niagara county, are of frequent occurrence in our letters:

"I think I have received benefit enough from your paper this season to pay for it five years by way of fattening hogs on apples and bran."

MOUSE TRAP.

The following contrivance for catching mice, will perhaps be new to most of our readers: Provide a large earthen pot, with a hole an inch or two in diameter in the bottom, (a large gardener's flower pot will do,) invert it on a board or flat smooth stone, and sink it in the ground, until the bottom of the pot is about level with the surface. Suspend, about two inches below the hole, by means of wire, a smooth wooden roller, which should be capable of turning freely on its axis. The surface about it may be sprinkled with chaff or short straw, and grain or seeds, and the roller be besmeared with lard and other attractive substances. Upon this roller the mouse leaps, and it immediately turns by his weight, and precipitates him to the bottom, from whence he cannot escape, as it is impossible for him to climb the sides. Many may be caught in the same trap without the trouble of re-setting. By burying the pot in mellow earth or sand it is easily taken up and replaced. This method is particularly adapted to catching mice in gardens, cellars, &c.

PRUNING APPLE TREES.

It is a common practice to neglect, almost totally, apple orchards after they have been planted; and in consequence of this neglect, the growth becomes crooked and irregular—branches decline upon the ground, and become so numerous and dense as almost completely to shut out the sun and air,—they become stunted, often covered with moss, and the fruit small and of inferior quality.

Moderate and judicious pruning would contribute essentially to prevent this evil, and even to recover trees which have not too far advanced in this unthrifty state; but where they have long existed without care, and have grown old and become diseased, it is cheapest to remove them at once, and plant young and vigorous ones in their places. Doctoring diseased old trees is never to be recommended, except they be of some favorite variety.

It is not advisable to prune very freely, but to commence before the trees become very large, and by a frequent and moderate trimming, prevent the growth of a thick and crowded top. The operation should be so performed that the straightest and most thrifty branches may remain; and their distance asunder be such as freely to admit light and air.

In pruning, branches should be cut off as closely as possible, provided it does not occasion too broad a wound. The place is then sooner covered with a new growth of wood. In general, wounds more than an inch in diameter, should be protected from air and moisture. If not, they become dry and crack, and let in the rain and rot, or admit insects. Tar, mixed while heated with a quantity of whiting or pounded chalk sufficient to prevent its running, is an excellent application. Or nearly the same purpose is effected if brick dust, or even fine sand, be substituted for whiting.

Pruning apple trees may be advantageously performed any time during winter.

Farm Implements and Labor Saving Machines.

As farmers generally have more leisure at the present season than at any other time of the year, we would recommend to their attention procuring and repairing such farming implements as they may need for use during the ensuing season. Ploughs, harrows, rakes, hoes, shovels, forks, carts, hay racks, scythes, cradles, and many other things, should be examined and put in order; and if there is a probability of there not being a sufficient number for performing conveniently the required work, it will be proper to procure additional ones to supply the deficiency. We do not wish to advocate a lavish waste of money in buying what would be unnecessary, but to direct the attention of farmers to the importance of always having at hand a sufficient number of tools. It is no evidence of economy to save a few shillings by refraining from the purchase of a rake or a hoe, and afterwards lose a day's work or more, in a hurrying season, in consequence of the deficiency thus occasioned. Neither is it a proof of economy to purchase the cheapest implements only. The cheapest are generally the worst made, and are either weak, or clumsy. We have known active workmen to waste nearly half their strength in using such—in performing, day after day, not more than two thirds of the labor they might have done, had they used strong, neat, and well made tools. As it is impossible to work *without* tools, so it is impossible to do work well and expeditiously, without *good* tools.

Another important subject, is that of labor saving implements and machines. There is one great advantage in these, which is generally overlooked. By enabling the farmer to despatch his business, his work is more completely under his control; and he is enabled to guard against loss or damage which might be the consequence of more protracted operations. Thus for instance, in using the horse rake, he is not only enabled to accomplish the same work with one quarter of the expense he would otherwise have to employ; but by enabling him to perform it so much more expeditiously, he can take advantage of the weather, and have many acres of hay upon the ground without the danger of having it spoiled by rain; as the speed with which he may collect it with a horse rake, enables him to anticipate the approach of wet weather. Thus, independently of the *immediate* amount of labor it saves, it prevents the troublesome operation of drying wet hay, after it has once before become fit for the mow or stack. Again, by the use of the planting or drilling machine, one man is enabled to do the work of several; this is one item of saving; but in addition to this, it very often happens that a crop may be planted with it during a favorable season, and while the ground is in the best possible condition; while, without it, the work might be protracted till the ground is rendered unfit by heavy rains; and a loss of many bushels to the acre sometimes arises from crops being planted out of season.

A vast amount of labor might be saved by employing a moderate share of thought and contrivance in constructing or procuring, and arranging, some of the simpler and more common kinds of labor saving machinery. Threshing machines have become very common, and many are connected with a portable horse power, which may be separated from the machine and applied to other purposes. This may be easily, and it sometimes is, attached to a circular saw, (the cost of which is comparatively small,) and the expensive and laborious operation of sawing wood by hand, is rendered expeditious and easy. It may also, with a little contrivance, be made to work a straw-cutting machine, a turnep and potatoe slicer, a corn sheller and other similar machines, which are commonly worked by hand; and this may be frequently done while it is driving a thrashing machine, or performing other work. We have known a fanning mill to be connnected

with it, and worked by it, the thrashing machine being situated on a floor above, so that the wheat fell directly from it into the hopper of the fanning mill, and passed out ready for market. We have also heard of a pair of buhr-stones placed in a barn, which could be driven by the horse power of a threshing machine, and used for grinding food for domestic animals. By a little attention and thinking, numberless similar conveniences may be devised. Improvements of this kind should not however be adopted, until calculation has proved that from the amount of labor they will be required to perform, the ultimate saving will more than counterbalance the immediate cost.

FODDER RACKS.

Do farmers fodder their cattle in the best way —that is, do they derive the greatest possible benefit from a given amount of hay, in the manner generally adopted by them in feeding it to their cattle and sheep? Hay by most farmers is thrown out into the yard, scattered about by forkfuls, and the cattle and sheep are left to scramble and fight for it, and get it in the best manner they may. If the yard is dry, or frozen hard, or covered with straw, or even snow, but little comparatively is lost; but if, as is very frequently the case, the yard is soft with mud and manure, it is evident much of the hay must be trodden down and totally lost, and even at the best, some will be so injured by being mixed with the dung that cattle will not eat it. Perhaps the only complete remedy for this evil is to feed cattle exclusively in stalls, and where this is practicable, the farmer undoubtedly finds his account in the diminished quantity of food required, and the superior condition of his herds; still, but few are able to adopt this mode of feeding to any great extent, and the plan which approximates the nearest to this, and is of general and easy application, should be adopted. Experience has shown that much of this loss and inconvenience in the feeding of cattle may be avoided by the use of suitable racks, and these are not so difficult in preparation, or so expensive as some may at first imagine; indeed, it is believed that the hay annually saved to the farmer by their use, would pay the expense of a yearly construction. Racks should be so made and set, that cattle or sheep may eat from both sides at once, as they thus occupy much less space, and can be made at the same time more portable. To construct racks, let a tree of suitable size be split into two parts, so that when the split surface is smoothly hewn, the pieces will resemble thick heavy slabs of sixteen or eighteen inches in width. By the way, heavy slabs of the ordinary kind, which may be procured from almost every sawmill, form very good substitutes for these split timbers, when they cannot be readily found. Near the edge of each side of these slabs let holes be bored, into which let rounds of wood be inserted; the rounds, if intended for cattle, may be four feet in length—if for sheep, two feet will be sufficient, and at such distances from each other as may be deemed advisable, always remembering that cattle should not be allowed to put their heads between the rounds, while sheep should be permitted to pass theirs at pleasure. The tops of the two rows of rounds should diverge from each other, so that while their distances at the bottom should not be more than ten or twelve inches, at the top it should be two and a half or three feet; and if a slight railing of board be fixed on the top of those racks intended for cattle, they will be so much the stronger and better; on the ones intended for sheep, no such security is necessary. Let legs in a bracing manner be put into the slabs, so as to raise them, if for cattle, two feet, if for sheep, one foot; let these feet rest on thin flat stones, so as not to sink into the earth, and the rack may be considered as completed. Now it is evident that when such racks are properly placed and filled with hay, both cattle and sheep can eat of it much more comfortably, and to far greater advantage, than if it was scattered over the earth, or mixed with the mud and water of the yard. If such racks were constructed of the proper length, say twelve or fifteen feet, they could be easily removed from place to place, as most convenient during the winter; and in the spring, when no longer necessary, by placing them under cover, as should always be done, they would last for years. Farmers should always bear in mind that no man loses by attention to the comfort, ease, and health of his cattle or sheep, and that all suitable efforts for this purpose are amply repaid in the end. It was the advice of the wisest of men, the poet, philosopher, and natural historian of the inspired writings, "Be thou diligent to know the state of thy flocks, and look well to thy herds,"—advice which, if proper in the mild climate of Palestine, becomes doubly appropriate in our latitudes, and during the freezing winters of New York. G.

THE GARDENER'S MAGAZINE.

We received "The (British) Gardener's Magazine for November," some days ago. It is hard to find whole articles adapted to our columns, and therefore we must content ourselves with brief extracts. We begin with "*Notes on Gardens in Inverness-shire.* By Mr. Elliot, gardener to Sir G. S. Mackenzie," who has been on a tour of observation.

Effects of Curved Walls.

Beaufort Park.—"The wall which surrounds the garden is of stone, lined inside with brick; it is wavy, or serpentine; but Mr. Bane says it is not so good as a straight wall, as *it causes currents of air.*"

Management of Bees.

"Mr. Bane showed us a bee-hive, consisting of three boxes on the same level, which communicate with each other by openings in the adjacent sides, furnished with fir sliders to exclude the bees at pleasure: the object is to get the honey without destroying the bees, by opening the communication with an empty box, and when the bees have left a full one, to shut the opening, and remove the box."

Few Sorts of Trees and Shrubs.

"One defect, which may yet be remedied, however, was very apparent; and that is, that this fine place, which contains sufficient space for every kind of ornamental tree and shrub that will endure the open air in Britain, is entirely planted with a few species, most of them common!"

With care to keep every thing neat, a few trees, shrubs, or herbaceous plants, may be made to embellish a small garden, or a small lawn; but in more extensive grounds, *a greater number of kinds* is necessary to prevent an unpleasing repetition. Many a garden in the United States might be rendered much more beautiful and interesting by increasing—not the *number*, but—the *variety* of its ornaments.

Remarkable Trees.

"I will now subjoin the measurement of a few trees which we had time to take:

[At *Relic Place*] Cedrus Libani* [the Cedar of Lebanon] 30 feet high; diameter of trunk 2 feet 8 inches; diameter of branches 60 feet, a beautiful tree. There are many other cedars of nearly equal size. We noticed a great variety in the color of the foliage, some of them being glaucous, and others grass green.

"Fraxinus excelsior [British Ash] 90 feet high; diameter of the trunk 5 ft. 7 inches; diameter of the branches, 72 feet. We were informed that this tree contained 196 cubic feet of wood; it is a beautiful timber tree, as straight as an arrow, and free from branches for a great height.

"[At Tulloch Castle there is a] Silver Fir 70 feet high; circumference 7 ft.; diameter of branches 20 ft. Evergreen Oak* 30 ft. high; diameter of branches 10 ft. Portugal Laurel* 20 ft. high; diameter of branches 15 ft. Arbor Vitæ 30 ft. high; diameter of branches 10 ft. Sweet Bay* 20 ft. high; diameter of branches 22 ft. Common Holly* 26 ft. high; diameter of branches 15 ft. Golden-striped Holly* 18 ft. high; diameter of branches 13 ft."

Chinese Sweet Scented Shrub.

(*Calycanthus præcox.*)

At Relic, there is, he says, "in the woods, some plants of Chimonanthus fragrans, growing and flowering freely."

We have long been satisfied that many Green-House plants would succeed in our woods, or in a thick shrubbery. An exotic that stands exposed to the unchecked velocity of freezing winds —that radiates its heat to the open sky—and has nothing to protect its roots but the *naked* soil,—is under very different circumstances from one that grows in a thicket where it is sheltered on every side, both from the wind and from the sky, while a coat of leaves covers up its roots from the frost.

We only make these remarks however, in passing to our main subject. The Chinese Sweet Scented Shrub (named by Prof. Lindley Chimonanthus fragrans) is nearly hardy in the Genesee Country, except in its flower-buds, which for several years with us have invariably been killed by the *intense* cold of our winters, chiefly if not entirely in consequence of their *starting* in autumn. Whether any thing better is to be hoped for hereafter, we cannot determine.

If our summers were not so much superior in several respects to those of Inverness-shire; and if we did not keep these advantages in view, we should regret that such beautiful evergreens as those marked with an asterisk are unsuited to our winters, unless protected in a manner which few cultivators would be willing to adopt on ac-

* Pinus Cedrus of Linnæus, Larix Cedrus of Salisbury.

count of the expense. There is however no scarcity of elegant trees and shrubs which will flourish here, and some which succeed decidedly better than in Britain.

In addition we would only remark, that the places visited by Elliot are near the middle of the 58th degree of latitude, being between fourteen and fifteen degrees further north than this district,—so much is the air in winter softened on the *east* side of the Atlantic by the westerly winds which pour its warm vapors *on* the coast.

Ornamental Perennials.

"I may just observe that Verbena chamædrifolia and V. pulchella at Braham Castle stood the winter without protection, and are now in flower. Verbena pulchella albida is very showy, and contrasts finely with the others."

On the Limits of Heat.

In the *Revue Encyclopedique* it is stated that M. Arago deduced the following consequences from a great number of observatious made with the thermometer:

"1st. In no place on the land, and in no situation, will a thermometer elevated two or three metres (from 6 to 10 feet) above the surface, and sheltered from all reverberation, rise to the 37th degree of Reaumur or 46th degree of the centigrade scale (=115½° Fahrenheit.)—2d. In the open sea, in whatever place and season, the temperature of the air never surpasses 24° Reaumur (=86° Fahr.)—3d. The greatest degree of cold observed on our globe, with a thermometer suspended in the air is—40° Reaumur (=58° Fahr.) —4th. The water of the sea in no latitude or season, acquires a temperature above 24° Reaumur or 86° Fahr."

We have introduced these results as a test for the following observations on the same subject, published in Silliman's Journal,and which "formed originally one of the concluding lectures of a course of chemical instruction." We trust the whole will be acceptable to our readers.

"We can hardly find any thing in the natural world more evincive of design, or more indicative of the wisdom of the Creator, than the means used to keep up that uniform temperature, which with some slight variations, is constantly maintained at the surface of the earth. Accustomed to see the varieties of temperature limited to so small a scale, you might content yourselves with thinking that this was the natural course of things, without taking the trouble to inquire whether any machinery of the natural world were adjusted on purpose to support this equilibrium of the temperature. But this happy adjustment is by no means accidental: we can even see the springs by which it is effected.

"*In the first place*, heat manifests the strongest tendency to diffuse itself in every direction. Let us concentrate it any given spot, and it flies off with inappreciable velocity; and unless the intensity be maintained by constant additions of heat, that spot or body shortly becomes reduced to the same temperature with surrounding bodies. Upon this agent itself, therefore, is impressed a character that restrains the violence which it seems constantly prone to exercise.

"*In the second place*, the AIR by its elasticity, affords the means of conveying off all excesses of heat. This cause operates in maintaining the equilibrium of temperature on a most extensive scale. We see its action, at one time in gentle gales and breezes; at another in the northern blast; at another, in dreadful hurricanes that sweep around this solid ball. All these, whatever partial evils they involve, contribute to this grand benevolent design: to keep the raging element of fire within its own narrow bounds.

"*In the third place*, the vast collections of WATER, which cover so great a part of the globe, furnish another means of regulating the temperature of the earth. So happily does it conduce to this object, that were the art of navigation still unknown, we might fancy that lakes and seas and oceans, were made on purpose to be reservoirs of heat in winter, and fountains of cool breezes in summer. The multiform changes of state which water undergoes, including congelation and liquefaction, evaporation and condensation, are all made subservient to the same end. These operations are the special barriers which Providence has set on the terrestrial part of the globe to check sudden excesses of heat and cold; and few instances of the proofs of intelligent design in the works of creation, among all those happy illustrations which Dr. Paley has collected, ever struck me as more convincing than these. On the approach of a cold night, it is pleasing to watch the thermometer and note the progress of its descent. Perhaps a sudden change of weather has caught the mercury at a high degree. You may see it descend rapidly to the freezing point; and were you unaccustomed to the result, you might imagine that a terrible frost was at hand. But the mercury no sooner reaches the freezing point, than its course is suddenly checked; congelation itself is made to contribute a portion of heat sufficient to mitigate the severity of the impending frost; and hours instead of minutes, are occupied in carrying the mercury through a few degrees below. In like manner it is pleasing to remark how retarded are its movements, as it approaches the extremes of heat. A hot day is passing over our heads, although as often happens, the morning was cool and temperate. In two hours perhaps, we have seen the thermometer rise from 50 to 80 degrees. Will the heat of two hours carry it forward 30 degrees more, to 110? Experience alone could ensure us against the approach of such a consuming fire. But what prevents it? The evaporation of water from the entire surface of the earth, is now set on foot, with hurried progress, hastening its speed as the heat increases, until it brings to a stand the furious element.

"By these mutual agencies of evaporation and condensation, of congelation and liquefaction, the excesses of heat and cold, to which the temperature of the surface of the earth is alternately prone, are so nicely balanced that among many thousand degrees of heat that lie between the known extremes of heat and cold, the whole range of natural temperature is only 90 or 100 degrees.* Pleasant and delightful as is this little space in the vast scale of temperature, where all animals so securely dwell, and where the flowers of spring bud and blossom and the fruits of autumn are matured, still it lies, like a small island in a sandy desert, between two regions of desolation and death, which seem about to blast it, on the one hand with withering frosts, or to consume it on the other, with devouring fire. The causes which we have just enumerated are those effectual barriers that Omnipotence has placed to guard this blooming animated spot against the dangers that encompass it."

* This may serve as a general or average estimate, but in the inland parts of Asia and of America in high latitudes, the range is much greater. Thus at Stockholm, Stephens says, that in the summer of 1811, the thermometer at one time indicated 96 degrees of Fahrenheit; but in the winter of 1814 it was 56 degrees below the freezing point, or 24 degrees below zero, making the range within those periods equal to 120 degrees. The annual range however, was doubtless much less.—*Ed. Gen. Far.*

NATURAL HISTORY---MUSQUITOES.

In Hitchcock's Sketch of the Geology, &c. contiguous to the Connecticut River, and published in Silliman's Journal, in speaking of the Secondary Greenstone, he says, "In almost any place along these mural fronts, two or three of the outer columns are easily removed by the application of a lever, being loosened by the ice of preceding winters.

"On tearing down some of these columns a few years since, during the winter, in search of chabasie, &c., I found the spaces between them occupied by an immense swarm of the common *musquito*. Poor insects! it was all over with them as soon as the avalanche thundered. The Hon. Elihu Hoyt informs me he found a swarm of these creatures in the winter, in a hollow tree."

We have often seen musquitoes in the winter on mild days in this district, but it was always in woods near swamps, and our impression was that they sheltered under the leaves.

AMERICAN WOOD SUPERIOR TO MAHOGANY.—We saw standing in the Arcade Hall yesterday, a well made and highly polished *Bureau*, made by Shaw & Tucker, St. Paul street, Rochester. This sample of the skill of our artisans is not only highly creditable to them, but also to the city in which they live. But aside from the skill manifested in the workmanship of the Bureau, it possesses additional interest from the fact that the veneering, exhibiting a polish of the highest grade, is the product of the American forest, and prepared to the sculpture's hand at the veneering mill of Mr. Whipple in this city. The veneering is of *Black Walnut*, and was introduced by Mr. Whipple as a substitute for Mahogany, about two years since, and though its use is of such recent date, it is superseding Mahogany wherever it comes in competition with it.

It has already become a general favorite in Canada among those who seek to adorn their mansions with the choicest furniture. The Black Walnut is also rapidly coming into favor in England, though its introduction there is of quite recent date. This wood, from which such rare specimens of art are produced, is abundant in the American forests, and though it has hitherto suffered comparative neglect, it seems destined to a celebrity surpassing that of the famed Mahogany.

COMMUNICATIONS.

LETTERS FROM A FATHER,

Living in the State of New York.

To his Son in Western Pennsylvania.

NO. IV.

To MY SON—When I closed my last letter, it was supposed nothing more remained for me to say on the subject of which it treated, that is, on the methods of draining wet land. Subsequently, after looking over what I had written, it occurred to me that there were some considerations relative to those subjects, which had not been duly adverted to. I now think it necessary to add to what I wrote in that letter a short appendix.

It should have been stated distinctly, that when waters, lying or floating on the surface of the ground, are to be counducted off, open drains are the only ones that can be successfully used for that purpose. Waters connected with circumstances thus expressed, must not be admitted into covered drains. If they are, their certain effect will be, to choke the drains and render them useless.

Since I have recommenced writing on this subject, I will suggest one other method of draining, which I do not recollect to have seen noticed in any publication. It can be applied only when the subsoil is the cause of excessive humidity, and that subsoil is thin, and can easily be perforated. Wet soils lying on subsoils of this description, may, I think, be drained by opening small holes through the subsoil down to the loose and porous earth beneath. The water around these holes from considerable distances, will soon make for itself subterraneous passages to them, and thus pass off, going down into the bowels of the earth. If a field, or part of a field, is to be drained in this manner, many such holes must be opened, at I cannot tell what distances from each other. Perhaps the distances may be 15 or 20 feet, but experience will decide this question. The holes thus opened are to be disposed of after the manner of covered drains, that is, they are to be filled nearly full with stones, if stones can be had, otherwise they may be filled with brush, placed in an upright position, or perhaps with small blocks of durable wood. This being done, straw or other rubbish is to be applied to keep the earth from falling in, and then the holes are to be covered with a good thickness of earth. Finished in this manner, the holes will be out of sight; they will present no impediments to tillage, produce no disfiguration of the field, and yet they will operate, perhaps from generation to generation, most effectually as drains. I have little doubt that this method of draining may, in many cases, be resorted to very advantageously. It will be practicable, however, only where the retentive subsoil is of no considerable depth. I have tried this method of draining in two instances, where wet cellars were to be drained, and the results were most satisfactory. I have also subjected it to one small experiment in my field husbandry, with similar results. Here I take my final leave, as to these letters, of the subject of draining. I have dwelt long upon it, because I know it was of vast importance, in relation to your husbandry.

I am now ready to call your attention to other subjects, and the one which I shall next present to your consideration, is that of manures. No subject connected with agriculture is more important than this. It demands your utmost regard, and it merits far greater attention than is generally given to it by the best practical farmers. There are many tillers of the ground, who appear to place no just estimate on manures, and of course they disregard some of the most essential requisites of good farming. Nothing else so clearly marks the line of distinction between good and bad farming, as the system of economy that is employed in regard to the accumulation and use of manures. I labor this point, because I know it is of primary importance, and absolutely essential to your success as an agriculturist.

Although there are many substances which are known to improve the productive powers of the soil, yet those most to be relied upon, are such as are accumulated in barn-yards, stables, and hogpens. Chiefly to these, therefore, will my investigations be limited. To you it is an important question, how are manures to be accumulated in sufficient quantities to meet the exigencies of your farm? To the barnyard will be your principal resort. I am glad to know that you have a barn-yard, and a good one. In this you are distinguished from many who call themselves farmers. Many there are who have no place that can, with propriety, be called a barn-yard. In many instances, the highway is used as a substitute for such yard. A good barn-yard is always to be regarded as an essential appendage to a farm, and this, I am happy to say, you have. Come, then, let us go, mentally at least, to your barn-yard, and see what can be done *there*, for the greater accumulation and better keeping of manure.

Your bard-yard is, if I have a correct view of it, well adapted to the uses which I am now about to suggest, but it needs some alteration in its form. One essential requisite of a yard well formed for the accumulation of manure is, that water have no passage out of it. It must be obvious to the weakest mind, that if water flow off from a yard, in which are collected considerable quantities of manure, it cannot fail of injuring the whole mass, besides carrying off many of its finest and most valuable properties. There is,in such cases, great waste. Enlightened and prudent farmers will endeavor to guard against such losses. Your barn-yard needs to be excavated in the middle, that is, there should be formed in the middle, or near the middle of it, a concavity or hollow place, in the form of a basin or milk-pan. This need not be large. Perhaps a concavity 20 or 25 feet in diameter, will be sufficient for your present purposes. A considerable space all round the yard should be so formed as to be always dry and clean, while the dung hole in the middle will be generally wet and unclean. Care must be taken to raise the ground on the lower sides of the yard, so as to prevent the escape of water, and every part of the yard should have a moderate inclination towards the bason or dung hole. Such is the form of barn-yards most approved by enlightened agriculturists of the present day.

Into the basin thus formed in your barn-yard may be cast all manner of vegetable and animal substances, which are useless only as articles that may be converted into manure. All the weeds that are cut on your farm, or in the streets near you, should be collected and put to this heap. To this place too should go all the bones that are cast out of your kitchen, and all the unclean rubbish that accumulate about you at times of butchering; and indeed every filthy article susceptible of putrefaction and conversion into dung, that may be found on your premises,should be carried to this general depository of manure. If you begin to practice in this way, and persevere in so doing, you will soon find at your disposal, large quantities of excellent manure. No matter if the water somestimes, or at all times, stands in the basin formed in your barn-yard after the plan above described. The manure will not be injured by it, but rather improved, if the water have no passage off.

I am aware that the suggestions which I have been making, may appear to you visionary and trifling. Think not so. They are not visions, neither are they trifles. The most enlightened and successful farmers in the state of New York view it as important to practice in the way here prescribed, and so do many of them practice, to their great advantage. Say not that such a concavity, or hollow place, in your barn-yard as has been described, will disfigure the yard, and produce some practical inconveniences. The inconveniences, whatever they may be, will bear no comparison with the advantages to be gained. I ought, perhaps, to remark here, for the benefit of others rather than yourself, that it is generally considered as important to have, under basins formed in the manner and for the uses here suggested, a retentive soil or subsoil, that is, to have under them such a soil or subsoil as will hold the water, and not allow it to penetrate into the ground. Of course, when the soil or subsoil to be operated upon is porous, and easily penetrated by water, it is the practice of some,in constructing basins, or dung holes, as above described, to puddle or line their bottoms with clay. But in your case, nothing of this will be necesary. I am satisfied the subsoil of your barn-yard is sufficiently retentive to answer all desirable purposes. The subject of manures will be continued in my next letter. A FATHER.

New York State, December, 1835.

AGRICULTURAL PHRASEOLOGY.

BY W. G.

No publication, whatever may be its subject or its merits, can be perused with advantage, unless the language used by the writer is understood, and the terms made use of clearly defined. Even definitions too frequently remind one of John Randolph in the House of Representatives. The hero of Roanoke, in one of his sarcastic and able, yet rambling speeches, found himself in the midst of a sentence so completely involved, that extrication was impossible, unless by cutting the gordian knot of words that inclosed him. "Mr. Speaker," said he, "the subject we are discussing, in the light I have presented it to you, is as clear as—as—the light of that window,—and that is not very clear," added he, pointing to the dusty windows of the capitol. Johnson, when he defined "higgledy piggledy" by "conglomeration," furnished a pregnant instance of the common fault of definitions. The

labors of Chaptal and Davy, by showing that many of what were formerly considered primitive earths, are merely combinations of a few of the principal ones, in different proportions, and by adopting an improved phraseology, have done much to simplify and render intelligible the language of agricultural chemistry, and its kindred subjects. Still there are many terms used necessarily more or less technical, or belonging almost exclusively to the business of agriculture, which we have reason to believe are not by all precisely understood, and as they must be considered as part of the language of every farmer in all countries, and are of importance in elucidating the practice as well as theory of agriculture, we have supposed that a paper studiously plain on some of these terms, might not be altogether without its use. Another reason has also had its influence in bringing us to this conclusion—the Genesee Farmer receives generally an accession of new subscribers at the commencement of the yearly volume; and besides, the Monthly Farmer we hope will find its way into the hands of multitudes to whom the weekly Farmer has been inaccessible; and though the readers of the latter may be in some measure familiar with the topics here introduced, we trust they will not be entirely useless to any.

In accomplishing our object, it will not be necessary to refer to more than three of the primitive earths—*Silex* or flint, *Alumine* or clay, and *Lime*—since, though chemistry has detected the presence of seven or eight others, they exist in such minute quantities, and are so sparingly distributed, as not to produce the least sensible effect on the great mass. Of these three earths, silex alone composes one-half of the globe, and lime three-fourths of the remainder. Silex is the base of all the granitic and sandstone rocks, and all soils formed by the disintegration or crumbling of these, are comppsed of gravel or sand. Hence such soils are termed *siliceous*, or sandy. Alumine is rarely found in a pure state, but in a mixed state,—is the basis of clay and several kinds of rocks. Soil in which alumine predominates is called *argillaceous* or clay soil. Lime is one of the most common earths, and from the important uses to which it is applied in civilized countries, is well known. It occurs most frequently combined with carbonic acid, in which state it forms limestone, marble, chalk, marine shells, and the shells of snails. The immense piles reared from the depths of the ocean by the coral insect, are also formed of lime. Combined with sulphuric acid, it forms that substance so all important to the farmer, gypsum, or plaster of paris. The soil in which this earth prevails, is called *calcareous*, or limestone soil. Thus the principal soils from their composition are termed Siliceous or sandy—Argillaceous or clayey—and Calcareous or limestone; and it is the combination of these original earths in different proportions with each other, and with vegetable mold, that forms the varieties of soil, different as they are in kind and fertility. Some writers formerly have spoken of loam as one of the original earths, but examination has showed it to be the primitive earths, alumine generally in the greatest proportion, thoroughly mixed with decayed vegetable matter. To determine which kind of earth preponderates in a soil, generally requires but little attention or skill. The presence of lime or calcareous matter in soils is determined by drying some of it and pouring upon it some acid—sulphuric acid, or strong vinegar will do; and the violence of the effervescence or foaming will be in proportion to the lime in the soil. Clay and sand, and their respective proportions, are in general so easily distinguished by the farmer as to need no remark. Marl however is sometimes mistaken for clay, but the application of an acid instantly shows the difference. Perhaps the best soil that can be found is a true sandy loam, containing lime enough to ensure the decomposition of all vegetable matter, clay enough to prevent its leaching, and sand enough to prevent its baking, or hardening in the sun. Such a soil is adapted to the production of a greater variety of vegetables than any other, and produces them in greater perfection, since it is generally of a first rate quality. It is evident therefore at first sight, that in order to cultivate a farm successfully, some knowledge of the constituent parts of its soil is necessary. Experience has proved that the use of lime has a great effect in fertilizing some soils; but to sow lime on a thoroughly calcareous soil would be like carrying coals to Newcastle, and to lavish gypsum or plaster upon wet heavy clay soils, would be a waste of both time and money; yet how often do we see farmers, from the want of a little knowlege or attention, pursuing a course of husbandry equally absurd. Where the quantity of sand is so great as to render the soil porous and friable, clay should be incorporated with it, and where the clay is in such quantity as to make it tenacious and liable to bake hard and crack in the sun, sand should be put upon it until the evil is removed. Upon soils purely calcareous, sand and clay united should be put, and upon all, vegetable mold or animal manure should be liberally used, if the highest degree of amelioration is our object. Marl is another important ingredient in the formation of soils. It is a substance consisting of lime mixed with a greater or less quantity of clay and sand, and frequently containing marine and animal remains. Where it can be applied in considerable quantities to a sandy soil—and nature seems to have wisely and kindly placed them in juxta-position, (witness the sandy plains of Long Island, Jersey, and the south,)—it converts such from being comparatively worthless, to the richest and most productive kind. It is by the judicious use of marl and manure, that Judge Buel of Albany has brought his sandy pitch-pine knolls to such an astonishing state of productiveness and fertility.

We shall here give the definition of a few other words and phrases, in addition to those above, as by long use, or appropriateness, they have become a necessary part of an agricultural vocabulary.

Vegetable Matter.—All vegetable substances, in a decomposed or rotten state.

Animal Matter.—All animal substances in the same situation.

Organic Matter.—Both animal and vegetable substances in a decayed state.

Long Manure—Is barn-yard manure before it is rotted, as fresh cornstalks or straw. Circumstances may justify the use of manure in this state, but experience has proved that it is not the most profitable way.

Short Manure.—This is a manure thoroughly decomposed or rotted in the yard. In this state it may be cut with a spade and shoveled as common earth.

Fossil Manure.—This is principally composed of lime, marl, shells and plaster, and on suitable soils is very valuable, a heavy dressing lasting for years.

Compost Manure.—This is made by mixing various substances, such as leaves from the forest, mud from the brook, weeds from the field or garden, the wash of roads, and in general any vegetable, animal, or mineral matter, that can assist decomposition into a common mass, and when possible, turning them frequently until reduced to a fine rich earth. This manure is most valuable for the gardener in those operations where nothing not perfectly rottted can be allowed.

Soiling—Is the feeding of cattle in a barn or yard during the summer with fresh grass or roots. As a grass for soiling, the lucerne is highly recommended, though the common clover is generally used. Of roots, the mangel wurtzel is often preferred, since its large fleshy leaves are ready for picking early in the season, and, provided the young and crown leaves are undisturbed, may be repeatedly stripped for food, until the root itself arrives at sufficient maturity for feeding.

Rotation of Crops, is a change from one kind of vegetable or plant to another in succession on the same ground. Its usefulness depends on the fact, that different plants do not take from the soil the same substances in the same proportions. Thus wheat does better after peas, barley or corn, than after rye or wheat; and plants whose roots run near the surface ought to succeed the tap-rooted kind. Much of the excellence of the modern system of farming depends on a skillful rotation of crops.

White Crops, are such as become dry and white while ripening their seeds; the different kinds of grain are of this class.

Green Crops.—The carrot, cabbage, pea, turnep, &c., those plants which continue green until ready to take off the ground, are called green crops. Such are much less exhausting than those that ripen their seed on the soil, and are therefore excellent in rotation with such.

Green Fallow.—When land intended to be sown with wheat in the fall has been kept mellow and clear of weeds during the summer, by some green crop, such as peas, turneps, potatoes, &c., it is termed a green fallow, in distinction from the ordinary fallow, when land is at rest from crops, but repeatedly ploughed and harrowed for the pulverising the soil, and the extirpation of weeds.

Lay, means land in the state of sward or grass: and by *clover lay* is meant land in clover immediately after mowing being turned over, and sown with wheat or other winter grain. Judge Buel and others have raised some extraordinary crops of ruta baga on clover lays, and where the soil in other respects is suitable, there can be no doubt as to the excellence of the practice.

Broadcast Sowing.—Seed sown in the usual manner by being scattered with the hand, is said

to be sown broadcast: if the seed is deposited in rows, it it termed *drilling*.

Culmiferous Plants.—All such as have smooth stems, and produce seeds enclosed in chaffy husks or coverings, such as wheat, rye, barley, oats, and most of the other grasses are of this class.

Value of Potatoes for fattening Hogs.

BY H. MERRELL.

Mr. Tucker—I have been satisfied for a long time, that pork for market made with merchantable grain was not profitable, and as I have never seen any account showing what potatoes were worth to feed, I concluded to ascertain by weight and measure, as per account below.

1835.	HOG PEN.	Dr.
Sept. 16.	To shut up 9 hogs weighing. 1305 lbs.	
22.	" bo't 7 (to fill up pens,) do. 883 "	
	——2188 at 3½c.	$76,58
	" 500 bushels potatoes, at 11 73-500ths cts	55,73
	" 45 bushels peas, at 4s	22,50
	" Salt, sulphur and charcoal,	1,37
	" 2 cords wood for steaming, at 6s.	1,50
	" killing hogs,	3,00
		$160,68

	Cr.	
Dec. 3.	By 2944 lbs. pork, at $5¼,	$150,88
	" 60 lbs. lard, at 8 cts	4,80
	" tongues and hearts, say	1,00
	" by inwards cleaned for soap,	4,00
		$160,68

The potatoes were all washed, (with machine,) steamed, mashed, salted and mixed with the swill of the house, and allowed to stand three days before feeding. Thirty bushels of the peas were ground and mixed with the last of the potatoes, and 15 were fed last without grinding. I think I did not commence feeding early enough, and did not feed long enough, but will try again and mix more ground provender the last half of time of feeding. Very respectfully,

H. Merrell.

Hounsfield, January 5, 1836.

From the Cultivator.

BONE MANURE.

From our restricted limits, we are often compelled to give, in a condensed form, articles which we should prefer to copy entire. The Farmer's Register contains a communication from A. Nicoll, on the effect of bone manure on corn. He induced his servants, by a small reward, to gather bones in his neighborhood, and to break them in a wooden trough with pestles shod with iron, into small pieces. He selected four rows in his corn-field, deposited a small quantity of broken bones in each hill, before dropping the corn, and covered both with earth. The corn in these rows became the most thrifty, maintaining a vigorous and rapid growth, while on each side, the crop suffered from drouth, the grain ripened better than that in the other parts of the field, exceeded in product that manured with dung at least one third, and more than doubled that of the land which had received no manure.

We have had considerable experience with this species of manure, appreciate it highly, and have been restrained from recommending its use, from a fear that we should be charged with *quackery*—from the scarcity of the material, and from the want of mills among us to break and pulverize it. The neighborhoods of cities and towns alone abound with the material in sufficient quanties to make it an object for the farmer. In 1834 we purchased 60 cart-loads, from an individual who collected bones from the butchers to *fatten hogs*, and collect grease for the soap boiler. We had them crushed in a plaster mill, and applied to various crops, upon a light sand soil. In most cases, they were applied in excess; and the crops became too luxuriant and lodged. It is extremely difficult for common laborers to appreciate their fertilizing properties, and to apply them so sparingly as they ought. An incipient state of fermentation should be induced, when they are intended to operate immediately on the crop. We effect this by mixing them in a pile, with ashes, and saturating the mass slightly with water. A fermentation soon ensues, when they may be strewn upon the ground, and buried either with the harrow or a shallow furrow. *The quantity applied should never exceed forty bushels per acre, and may range from that to twenty-five.* We applied them in one instance in the fall, without fermentation. The crop received no apparent benefit from them; but the second crop, although the ground was not manured, was treble or quadruple the ordinary product afforded by the same field. We estimate that their beneficial influence will not be exhausted under five or six years. It is estimated by English husbandmen, that bone manure produces no effect upon stiff clays—we have not tried the experiment—and that it profits the turnep crop most when drilled in with the seed.

The truth is, all animal matters are manure in a concentrated form, and should be applied sparingly. We have lately published two notices of remarkable fertility induced by the flocks or taglocks, and sweepings from woolen factories. We have used, to the extent of fifteen wagon loads in a season, the piths of cattle's horns, after being divested of its horny part by the comb-maker, and we have used some hundred bushels in a season of comb-maker's shavings. We apply the latter at the rate of about thirty bushels to the acre. We first cut the former upon a block, with an old axe, into pieces, then strew them upon the land and plough them under. These are years in decomposing.

From the Cultivator.

NOTES ON FARMING.

FROM OUR MEMORANDUM BOOK.

Breeding.—It is laid down by Cline, and sanctioned by practiced breeders, that any improvement of form by crossing, must depend entirely on the selecting a well formed female, larger in size than the usual proportion between females and males. Let the male be rather small with good points.—*Sinclair, p.* 61. The Hollanders manage upon this principle, and seldom employ a bull when over two or three years old. A cross of a merino buck with a Leicester ewe, in the course of four or five generations, will produce fleeces rivaling in fineness Spanish fleeces (?)—*Sinclair, p.* 14.

Growth of Trees.—A plantation in Norfolk, Eng. 30 years old, gave the following dimensions five feet from the ground:—Scotch firs 39 inches in circumference, larch 36, beach 32, alder 32, ash 21, oak and chestnut 28.—*Marshall.* The inhabitants of our old settlements will learn, from this, when it is time to begin to plant timber trees for their children. The present forests of Great Britain have been all planted by the hand of man.

Planting.—" A landholder," says Cato, "should apply himself to planting of his fields while in youth, but he ought to think long before he builds. He ought not to *think* about planting, but he ought to *do* it. When he is about thirty-six years of age he may build, provided his fields are planted.

The fact with us seems to be, that we do not find time to plant when we are young, and when we are old we consider it too late—for we are unwilling to sow where we are not likly to reap the harvest. We should at least *preserve*, if we will not *plant*.

Fellenbergh's School of Agriculture.—Two only of the pupils have left Hoffwyl for a place, says Simond, before the end of their time; and one of them, with M. de Fallenbergh's leave, is become manager of the immense estate of Count Aboffy, in Hungary, and has doubled its proceeds by the improved methods of husbandry he has introduced. This young man, whose name is Maderly, was a beggar boy, and not particularly distinguished at school. Another directs a school establishment near Zurich. M. Fallenbergh has besides a number of pupils of the higher classes, some of whom belong to the first families in Germany, Russia and Switzerland. They live *en famillie* with their master, and are instructed by the different tutors, in the theory and practice of agriculture, and in the arts and sciences on which it is founded.

Carrots are sown in Flanders, in the spring, upon winter and spring grain,—and give a crop after the grain is harvested.—*Sinclair.* We have little doubt but the practice, upon deep ameliorated soils, would answer tolerably well here, as the carrot makes most of its growth after midsummer, when the grain is harvested.

Milk.—To divest this, and butter, from the taste of turneps, cabbage, wild onions, or other offensive plants, on which the cows have fed, put a quart of boiling water into each pailful of milk when it comes from the cow.—*Marshall.* We have tried, and found it successful. The principle of flavor is volatile, and the heat of the water dissipates it.

From the Boston Horticultural Register.

BUCKTHORN HEDGES.

I have great pleasure in complying with your lately expressed wish, that I should furnish for the pages of your useful and highly interesting Magazine, some remarks relative to the cultivation of the American Buckthorn, or Rhamnus catharticus, for the formation of live hedges. I have, myself, long been convinced of the superior durability, economy, and efficacy of this method of enclosure, over those in more common use among us; and have had much pleasure in watching, for the last few years, its steadily increasing adoption by the farmer and horticulturist of our country. The rapid increase of our population, and the consequent vast consumption of timber for other and more valuable purposes, by increasing the relative cost of the old fashioned wooden fences, must eventually render the introduction of hedges here, advantageous, if not absolutely essential, from motives of utility and economy; while the lover of rural scenery will hail with pleasure the picturesque charm of their verdant beauty.

It is now about thirty-two years, since I first attempted the formation of a live hedge as a boundary for my own pleasure-grounds. My first experiment was made with the English Hawthorn, the plant commonly used for the "trim hedgerows" of England, and particularly well suited to that moist climate, but poorly adapted to our dry summers; it is also liable to the attacks of the Borer, which in some instances has destroyed large portions of the hedge, and is almost invariably assailed early in August by mildew and blight, which rob it of foliage, and cause it to assume a wintry appearance. My next attempt was with the Tripple Thorned Acacia, a native of our Western States; but this plant not being adapted to our climate, was too tender to bear its changes, and suffered both from the heat of our summers and the severity of our winters, and the result, in both cases was a decided failure. I also tried the Crab Apple Tree, but without better success.

In 1809 I made another trial by setting out some young plants of the American Buckthorn, and this time with perfect success; this hedge, which is about twenty rods long, has never failed in any part, and is now a fine healthy fence, having, during twenty-six years, needed no repairs but the annual clipping, which is easily performed by a common laborer. The plant is a hardy one, sending out many small branches, which naturally interlace. Encouraged by the entire success of the experiment, I have continued to enclose my garden and other parts of my grounds with the Buckthorn; I have now about

one hundred and twenty rods in fine order, and am entirely convinced of the efficacy of this hardy native plant for an impervious hedge, and of its perfect adaptation to our climate, where it remains in full leaf from early spring until the severe frosts of a late autumn.

My method of cultivation, is, to place the plants of about three years' growth in a single row, about nine inches apart, either in the spring or autumn; If the latter, I clip them the next spring within six inches of the ground, in order to thicken the lower branches, which is very important to the beauty of the hedge; the next spring I clip within two feet of the ground; and the third spring within three feet, with a little pruning at the sides each year, to form a regular surface.

Three years such management as I have described, will form a perfect and beautiful hedge, and it will afterwards need only such clipping as shall keep it within bounds, and suit the taste of the proprietor. The simplicity of this management, and the strength and hardihood of the plant, render success almost a matter of certainty; and I think the result cannot fail of being satisfactory to the the cultivator. I have, within a few years, furnished and distributed into different sections of the United States, plants sufficient to extend several miles, and if the unqualified admiration of my hedges, expressed by those who visit my grounds, has any foundation in truth and sincerity, this plant has a decided preference over any other.

Salem, Dec. 21, 1835.

Meteorological Table,

KEPT AT ROCHESTER, FOR DECEMBER, 1835.

Days.	10 A. M. therm.	10 A. M. barometer.	10 A. M. winds.	10 A. M. sky.	10 P. M. therm.	10 P. M. barometer.	10 P. M. winds.	10 P. M. sky.
1	24	29,50	w	cloudy	16	29,65	w	cloudy
2	11	30,00	N w	fair*a*	09	30,10	w	fair*l*
3	18	29,95	s	do*b*	36	29,60	s	do*m*
4	38	29,40	s w	cloudy*c*	30	29,40	N w	cloudy*n*
5	25	29,30	w	fair*d*	16	29,45	N w	do*o*
6	22	29,25	w	cloudy*e*	20	29,30	w	do*p*
7	20	29,50	w	do*f*	20	29,55	w	fair
8	20	29,55	N w	do	23	29,55	w	cloudy
9	34	29,10	s w	do	27	29,50	N E	do*q*
10	21	29,85	N w	fair*g*	17	29,55	N w	fair
11	20	29,85	w	do	28	29,75	s	do
12	38	29,75	s w	do	28	29,70	s E	do
13	36	29,55	s w	do	34	29,35	s w	cloudy
14	38	29,10	s w	cloudy*h*	19	29,50	N w	fair
15	30	29,30	s w	do*i*	01	29,55	N	cloudy*r*
16	00	29,75	N	do*j*	04	29,95	N w	fair*s*
17	10	29,95	w	fair	12	29,85	w	do
18	20	29,75	N E	do	24	29,70	s E	do
19	31	29,75	s E	do	13	29,60	s E	do
20	47	29,50	s	cloudy*k*	41	29,55	w	do
21	38	29,60	w	fair	30	29,50	N w	do
22	22	29,60	w	do	20	29,70	N w	do
23	22	29,80	w	do	23	29,75	s w	do
24	32	29,75	s w	do	38	29,55	s	do
25	14	29,45	s w	cloudy	42	29,35	s w	cloudy*t*
26	47	29,25	s w	do	40	29,10	s	do*t*
27	24	29,40	N w	do	22	29,55	N w	do
28	34	29,40	s w	do	34	29,45	w	fair
29	42	29,25	E	do	34	29,25	w	cloudy*t*
30	36	29,25	N E	do	31	29,40	N E	do
31	25	29,65	N	do	22	29,60	S	fair

MEANS.—Ther. 28.5—Bar. 29.56—Rain 0.5 inches—Snow 10 inches.

a 11° at sunrise—*b* 10° at sunrise—*c* rainy, poor sleighing—*d* high winds—*e* snows fast—*f* snow 1 inch—*g* snow 2 inches—*h* snow ½ inch—*i* spring water 50°—*j* snow 3 inches, 3° below zero at runrise—*k* snow gone, fine wheeling—*l* temp. not above 14° all day—*m* wind south at 2 P. M.—*n* rainy all day—*o* high winds, snow 1 inch—*p* snows, 3 inches—*q* snows—*r* snows and blows, 1° below zero—*s* great fire in New York—*t* rainy.

Annual Mean Temperature, &c. for the last five years.

Years.	Mean temp.	Mean press.	Inch rain.	Inch snow	Tem sp.w.	Lowest tempe	Higdest temper.
1831	48°4′	29.49	29.9	77	47	Feb. 7, 4° below.	June 3, 95° above.
1832	50 1	29.52	24.3	72	47	Jan. 27, 6° do.	June 25, 88° do.
1833	49 6	29.49	22.6	75	46	Jan. 17, 4° above.	July 21, 91° do.
1834	51	29.52	18.1	52	47	Jan. 4, 10° do.	July 9, 95° do.
1835	47 5	29.52	25.9	68	48	Feb. 3, 3° below.	June 11, 90° do.
Me.5 yr's.	49°3′	29.47	24.1	68.8	47		

COMPARATIVE VIEW FOR FIVE YEARS.

The following Table shows the difference of Temperature, &c. of each month for the last five years.

Months.	Temperature. 1831	1832	1833	1834	1835	Pressure of Atmosphere. 1831	1832	1833	1834	1835	Inches Rain. 1832	1833	1834	1835	Inches Snow. 1831	1832	1833	1834	1835	Temper. Srpring Water. 1831	1832	1833	1834	1835
January,	23°	26.4	31.4	26	30.1	29.45	29.56	29.42	29.67	29.54	.9	1.4	.3	1.3	15	15	11	13	7	37	39	35	39	43
February,	23.5	26	26	37	22.4	29.70	29.63	29.51	29.54	29.56	.4	0.0	.5	.8	33	29	35	9	19	36	37	37	39	40
March,	41.8	38.6	35.4	38	35.5	29.39	29.44	29.50	29.58	29.59	.8	.1	1.5	.5	5	9	7	8	16	37	38	36	42	40
April,	47.5	47.4	52.5	51	44.8	29.38	29.48	29.54	29.52	29.41	1.5	1.8	2.2	2.6	2		1	2	9	42	41	41	45	40
May,	59.7	57.2	62	60	59.8	29.42	29.51	29.51	29.48	29.50	4.3	6.1	.3	1.	6			4		48	48	50	45	44
June,	71.6	70.3	62	65	65.9	29.53	29.50	29.42	29.38	29.48	1.2	2.6	1.9	4.5						52	50	52	49	51
July,	71.3	74	70.9	76	72	29.49	29.50	29.51	29.55	29.46	4.	3.8	1.8	1.8						58	54	54	55	56
August,	71	70.5	68	73	68.7	29.61	29.60	29.49	29.50	29.49	2.	2.	1.8	3.5						60	56	56	59	54
September,	60.9	62.8	63.5	65	57.7	29.50	29.54	29.54	29.57	29.55	2.4	1.5	2.1	2.5						57	56	55	59	55
October,	51.5	52.6	49.5	51	53.8	29.54	29.50	29.46	29.68	29.52	4.2	1.3	3.4	5.4						54	53	56	53	56
November,	38.9	41.5	40.4	40	41.3	29.44	29.51	29.48	29.37	29.60	1.6	1.	1.8	1.5	3	6	8	2	7	48	49	51	46	52
December,	19.5	34.5	34	30	28.5	29.49	29.47	29.56	29.60	29.56	0.0	1.	.5	.5	13	13	13	14	10	40	44	42	41	50

The Complete Farmer & Rural

ECONOMIST,

BY Thomas G. Fessenden, Editor of the New England Farmer, second edition, revised, improved, and enlarged, just published and for sale at the Rochester Seed Store.

This work is got up in superior style, published on fine paper with new stereotyped impression, and is decidedly the neatest thing of the kind yet published in this country. Booksellers and others supplied by the dozen at the trade price.

Meteorological Synopsis for every month

OF THE YEAR 1835.

Months.	Ther.	Baro.	Rain	Sno.	Sp. wa.
January...	30°1′	29.54	1.3	7	43
February..	22 4	29.56	.8	19	40
March....	35 5	29.59	.5	16	40
April.....	44 8	29.41	2.7	9	40
May.....	59 8	29.50	1.		44
June.....	65 9	29.48	4.5		51
July.....	72	29.48	1.8		56
August...	68 7	29.49	3·5		54
September.	57 7	29.55	2.5		55
October...	53 8	29.52	5.4		56
November.	41 3	29.60	1.5	7	52
December.	28 5	29.56	.5	10	50
An. Mean.	47°5′	29.52	25.9	68	48°5′

Feb. 3d, 3° below zero—May 22d, last frost—June 11th, 90° above zero—Aug. 3d, frost in some places—Sept. 30th, sleet—Oct. 24th, Genesee River highest ever known—Nov. 11th, 28.65 at 4 P. M.—Dec. 16th, 3° below zero.

List of Payments

For the Farmer from Jan. 15, *to Jan.* 22, 1836.

For vol. 6.
Charles Davis.
Stephen Leggett.
Paris Barber.
Vincent Lovell.
Silas Gaylord.
Samuel Rhoades.
Lewis W. Cleveland.
James Cromwell.
William Janes.
J. C. Hathaway.
Hugh Stewart.
Wm. Yates.
M. C. Cropsey.*
John Haycock.
Sylvester Hosmer.
J. L. Beebee.
Patrick McEntee.
Jehiel Glasgow.
Jared Patchen.
Saxton & Butterfield.
Charles Cameron.
Ira Palmer.
John Wright.
Jacob G. Lambert.
Wm. Fox.
F. T. Fox.
John Bryant.

For vol. 5.
German Lathrop.
Wm. A. Hart.
John Morse.

Last half of vol. 5.
G. S. Lanterman.
James C. Hawley.
Chauncey Nash.
N. H. Sherrill.
A. J. Caldwell.

First half of vol. 6.
James Peters.
Samuel Waldo.

Last half of vol. 6.
S. Porter Rhoades.

From July, 1835, *to July,* 1836.
Amos Darwin.
Harry Gregory.
Edward Haycock.

* This should have been acknowledged last week.

Fresh White Mulberry Seed.

100 POUNDS of *Genuine White Mulberry Seed*, raised in Connecticut, and warranted the growth of 1835. For sale at the sign of the "GOOD SAMARITAN."

Hartford, Conn., Jan. 5, 1836. jan 16–f4t*

1000,000 Silk Worm Eggs,

FOR SALE.

THE subscriber having promised to supply so many individuals who called to see his worms at work last year, and he having already sold so many, deems it proper to advise those who have not yet received any, and are intending to have some, that they must order them at once, or possibly they will be disappointed, the demand being so great, and this being the proper season to forward them. They are sold for 25 cents a thousand. Orders enclosing the amount will be punctually attended to.

JAMES HOUGHTON.

Rochester, Jan. 7, 1836. j7rf3m

COBB'S MANUAL OF CULTURE OF SILK, &c. for sale by

HOYT & PORTER.

Signs of Approaching Foul Weather.

BY DR. DARWIN.

The *hollow winds* begin to blow;
The *clouds look black*, the *grass is love*;
The *soot falls down*, the *spaniels sleep*;
And *spiders* from their *cobwebs peep*.
Last night the *sun* went *pale to bed*;
The *moon* in *halos* hid her head.
The boding shepherd heaves a sigh,
For see, a *rainbow* spans the sky.
The *walls are damp*, the *ditches smell*,
Closed is the pink-eyed *pimpernell*.
Hark? how the *chairs* add *tables crack*,
Old BETTY's *joints* are on the rack:
The *corns* with *shooting pains* torment her,
And to her bed untimely sent her.
Loud *quack the ducks* the *sea fowl cry*,
The *distant hills* are *looking nigh*.
How restless are the *snorting swine!*
The *busy flies* disturb the *kine*.
Low o'er the *grass* the *swallow wings*.
The *cricket* too, how *sharp he sings!*
Puss on the hearth, with *velvet paws*,
Sits *wiping* o'er her *whiskered jaws*.
The *smoke* from *chimneys right ascend*;
Then spreading, *back to earth it bends*.
The *wind* unsteady *veers around*,
Or sitting in the *South is found*.
Through the clear streams the *fishes rise*,
And *nimbly catch* the incautious *flies*,
The *glow worms*, numerous, clear and bright
Illumed the *dewy hill* last night.
At dusk the squalid *toad* was seen,
Like *quadruped*, stalks o'er the green.
The *whirl wind* the dust obeys,
And in the *rapid eddy* plays.
The *frog* has changed his *yellow vest*,
And in a *russet coat* is dressed.
The *sky is green*, the air is still,
The *mellow* blackbird's voice is shrill.
The *dog*, so altered in his taste,
Quits mutton bones, on *grass* to feast.
Behold the *rooks*, how odd their flight,
They imitate the *gliding kite*,
And seem *precipitate to fall*,
As if they felt the piercing ball.
The *tender colts on back do lie*,
Nor heed the traveller passing by.
In *fiery red* the *sun* doth *rise*,
Then *wades through clouds* to mount the skies.
'Twill *surely rain*, we see't with sorrow,
No *working in the fields to-morrow*.

The Voice of History.

Of all the sciences, there is no one that enlightens the mind so much, or conduces more, to the humbling of human pride than a general knowledge of ancient and modern history.

In these annals of mankind, we see the manners of every age and nation, and the various characters of those who had the direction of all public affairs also the motives, causes and consequences of all their actions.

We may also see the rise and progress, the exaltation and decline of the most powerful states and empires; and trace the cause of their dissolution from the first rudiments of decay to its final completion.

The prospect we thus explore is, indeed, very humiliating, as it presents little else than scenes of chicanery and violence, of horror and devastation. But a review of it may suggest to the attentive mind some instructive and profitable considerations.

It will teach us the instability of all human things, and tends to lessen our dependence upon them. It will show us what man is, when he revolts from that which alone is capable of governing him aright, and is left to the direction and impulse of his own passions.

We shall see that every thing beneath the sun is subject to change, and by observing what the causes were that brought the great empires of Assyria, Persia, Greece, and Rome to an end, we learn to guard against them in the present times.

In Kingdoms and Empires there seems to be a gradual progress to mutiny, and also to degeneracy and decay, not unlike that seen in the human body.

From a state of infantine weakness, both gradually increase in strength, and vigor, and stability till arrived at the summit of their destined perfection and glory.

From this point they progressively decline to a state of obvious weakness and decrepitude, the certain prelude of approaching dissolution.

The fame of the first Assyrian monarchy is very ancient, it having been founded more than 2000 years before the commencement of the christian era.

This Empire was doubtless very great—and of long duration, yet the time, and the imperfections of human beings, brought it to an end.

The glory and splendor which it exhibited through a long succession of ages, were all effaced and its power weakened by the depravity of the people, and at length totally lost, through their cowardice and treachery, when conquered by the effeminate Sardinapalus.

For causes nearly similar, fell the great preceding empire of the Medes and Persians, which gave an opportunity to Alexander the Great, or, as some called him, the "Maccedonian Madman,"—and to establish his throne upon its ruins.

The Grecian States, while united and governed by the ancient laws of the Republic, were the admiration and the terror of the East. But their wisdom is departed, they have long since ceased to terrify, and the glory of Athens is laid in the dust.

Tyre, once the "mart of Nations is no more crowded with ships. Her merchants are no longer princes; nor numbered among the honorable of the earth."

The evangelical prophecy is accomplished, and where proud navies, freighted with the treasures of the East, once rode, the fisherman now spreads his nets in solitude and silence.

Thebes, Palmyra, Persepolis, and Balbeck, have long since been the seats of desolation, and only present to the pensive traveler, who explores the remaining vestiges of their ancient magnificence, with the striking proof of the instability of human things.

Nor has the once mighty Roman Empire, or its proud Capital, found an exemption from the general fate.

The Empire of Rome was founded on a basis deemed impregnable to all human attacks, and guarded by laws well calculated to secure its stability and duration.

It was long protected and governed by consuls tribunes, and dictators, eminent for wisdom, probity and valor.

It grew great by the accession of many provinces and kingdoms. Its splendor was increased by the pomp and riches of innumerable triumphs.

By successive victories it became so powerful that for many ages it could not be shaken. But at length the prevalence and effect of luxury sapped its foundation.

Through the gradual decay of its military discipline and public virtue, and the influence of ambition and internal discord, its native strength was lost, and its forces were turned upon itself, to the annihilation of its ancient liberties, happiness and greatness.

And although, after these became extinct, the little public virtue which remained in the breasts of individuals was sometimes exerted for their restoration, every attempt was made in vain; and the power of Rome, by degrees, still declined like an aged body deprived of its vital nourishment, and was totally subverted.

From these causes, and by these gradations, ROME *fell*, and became an easy conquest, to those barbarous nations over whom her eagles had formerly triumphed.

Ignorance and superstition usurped the ancient seat of learning, science, eloquence and the fine arts which had now fled forever.

Her temples were sacked, and her towering structures, which had been objects of universal admiration, were demolished, or remained only the defaced and melancholy vestiges of her former glory.

From the instability and imperfection of all sublunary things, a similar fate will probably attend the present and all succeeding States and Nations.

On the best constructed, and most admired fabrics of human wisdom and human pride—mutibility and decay is the universal inscription.

A certain portion of greatness, dominion and glory, is permitted to exist in the world, but this is ever subject to mutation.

It verges like the light of the sun, from one part of the globe to the other. Succeeding empires are raised on the ruins of those which had fallen.

Thus like the phœnix in the fable, when one is destroyed, another springs up from its ashes.

These reflections, on the rise and fall of ancient states, naturally lead to a consideration of that whereof we are members, and also to a consideration of ourselves.

As individuals of a like community, which must sooner or later experience a like change, every one is interested in the inquiry.

What tends most to increase or destroy the happiness of a kingdom, empire or a state? To weaken or give it stability? The same questions are in a great measure applicable to families and individuals.

From this history of past ages, it appears that luxury has always been the original and grand cause of that disorder and ruin in which the great states and empires have been involved, and by which they have fallen.

The same cause may be applied to the fall of families and individuals. Luxury, and its constant attendants, imbecility of mind and body, are the canker-worms of every political state, whether public or private.

Luxury naturally makes a rapid progress among all ranks of people. Nothing is so inimical to the happiness and welfare of individuals, families and nations, as giving away too much to luxury.

The superior classes, who ought to be patterns of temperance and virtue, are too apt to set examples of prodigality and dissipation.

In these vices, the inferior classes of the people have followed their superiors so closely that, as Shakespeare shrewdly remarks—

"The toe of the peasant comes on the heel of the Courtier, that galls his kibe."

This is the case not only in luxury and extravagance, but most other vices, wherein they seem to pride themselves in being as great proficients as their superiors.

Hence it highly behooves every man to consider his case, and endeavor as an individual, bring about a general reformation, on which the public as well as private security and happiness solely depend; and consequently, that he should be first solicitious, be jealous of those rights and liberties which are his dearest prerogatives; and support them with a decent but manly fortitude, unawed by the frown of tyranny, and uncorrupted by the smile of liberty.

Were this the case, all measures of public conduct, which have private interest or ambition for their object, would be checked in the origin of their existence.

If these remarks are duly and properly attended to, that destruction which frequently seems suspended over us, would be averted, and peace and happinesss would diffuse their blessings all around.

Robbins' Planting Machine.

WITH this Machine Corn, Beans, Peas, Broom Corn, Mangel Wurtzel, Turneps, Onions, and seeds of almost every description, can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe. One man may easily plant five acres a day, placing the seeds any given distance apart, from two or more inches, and in rows two and a half feet apart.

Machines can be had by applying to REYNOLDS & BATEHAM, Rochester; C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL T. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville, Nov. 24, 1835. nov 28-6m